

Title (en)  
SPOT-WELDED JOINT AND SPOT WELDING METHOD

Title (de)  
PUNKTGESCHWEISSTE VERBINDUNG UND PUNKTSCHWEISSVERFAHREN

Title (fr)  
JOINT SOUDÉ PAR POINT ET PROCÉDÉ DE SOUDAGE PAR POINT

Publication  
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Application  
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Abstract (en)  
The present invention has as its object to provide a spot welded joint and spot welding method which raise the fracture toughness of spot welded metal to raise the strength of the spot welded joint. In the present invention, there is provided a spot welding method comprising a melt zone forming step forming a melt zone by conduction and, after the melt zone forming step, a solidification step of running a current lower than the current run in the melt zone forming step so as to cause the melt zone to solidify, wherein, in the solidification step, electromagnetic vibration is applied to the melt zone, and a frequency  $f_v$  of the electromagnetic vibration, a solidification speed  $\frac{1}{2} S$  when the melt zone solidifies, and an arm interval of dendrites when the melt zone solidifies satisfy  $0.2 \leq \frac{S}{f_v} \leq 4.0$ .

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